

# WATER QUALITY M E M O R A N D U M

Utah Coal Regulatory Program

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January 12, 2004

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Gregg A. Galecki, Reclamation Hydrologist III

RE: 2003 Third Quarter Water Monitoring, Canyon Fuel Company, LLC, Dugout Mine, C/007/0039-WQ03-3, Task ID #1731

- 1. Was data submitted for all of the MRP required sites?** YES [ x ] NO [ ]

*Identify sites not monitored and reason why, if known:*

- 2. On what date does the MRP require a five-year re-sampling of baseline water data.**

*See Technical Directive 004 for baseline resampling requirements. Consider the five-year baseline resubmittal when responding to question one above. Indicate if the MRP does not have such a requirement.*

**Re-sampling due date**

Baseline sampling was conducted at the required sites during the 3<sup>rd</sup> quarter 2002.

- 3. Were all required parameters reported for each site?** YES [ x ] NO [ ]

*Comments, including identity of monitoring site:*

Of the 24 total samples required for sampling this quarter, all sites were accessible and were sampled with one exception. Well GW-24-1 is blocked and access to the water is no longer possible. No plans to correct the breach are anticipated. The Operator should take this well off the water monitoring schedule.

- 4. Were irregularities found in the data?** YES [ x ] NO [ ]

*Comments, including identity of monitoring sites:*

Water quality in MD-1 (Old Johnson mine / Gilson seam) has changed significantly since spring 2002 when they started pumping the old workings. Dissolved Magnesium, Dissolved Sodium, Chloride, Sulfate and TDS have all increased since pumping began. However, flow is often reduced significantly since the site was thought to primarily be recharged from the old mine workings. This condition continues to be monitored.

Depth to water in Well GW-11-2 has dropped approximately 142 feet suddenly this year; no explanation has been given.

**5. Were DMR forms submitted for all required sites?**

*Identify sites and months not monitored:*

1<sup>st</sup> month, YES [ x ] NO [ ]  
2<sup>nd</sup> month, YES [ x ] NO [ ]  
3<sup>rd</sup> month, YES [ x ] NO [ ]

**6. Were all required DMR parameters reported?**

YES [ x ] NO [ ]

*Comments, including identity of monitoring sites:*

**7. Were irregularities found in the DMR data?**

YES [ ] NO [ x ]

*Comments, including identity of monitoring sites:*

UPDES site 001 (Mine Discharge) discharged a total of four (4) times during the 3<sup>rd</sup> quarter. Of the four discharge events, one exceeded the 2,000 lb/day total limit on Total Dissolved Solids (TDS) and the daily maximum of 1 mg/l on Total Iron; July 7 with 3,452 lbs, and 4.69 mg/l, respectively. On the July 7 discharge, the concentration of TDS was 1915 mg/l with a flow of 150 gpm. As with site MD-1, this is discharge related to draining of the Gilson seam (Old Johnson Mine). The Gilson seam is thought to be recharged slowly from groundwater, however the workings have sporadically flooded to the point requiring emergency discharging of the water due to safety concerns. The flooding of the Gilson seam is a situation that continues to be monitored.

**8. Based on your review, what further actions, if any, do you recommend?**

No further action is necessary for the 2003 3rd Quarter Water Monitoring data.